



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

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January 25, 2011

The Honorable Julius Genachowski  
Chairman, Federal Communications Commission  
Office of the Commissioners  
445 12th Street, S.W., Room 8B201  
Washington, D.C. 20554

**Subject: LightSquared Application Request for Modification of its Authority for Ancillary Terrestrial Component (ATC) (FCC File No. SAT-MOD-20101118-00239)**

Dear Mr. Chairman:

The National Public Safety Telecommunications Council (NPSTC) is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. Accordingly, NPSTC provides guidance on issues that can either negatively impact or benefit the operation of public safety communications.

NPSTC specifically wants to express the need to ensure public safety use of GPS is protected from potential interference that could result by granting of the above-referenced application filed at the Federal Communications Commission (FCC) by LightSquared. Public safety uses such as wireless 9-1-1 location, and use of GPS to support: (1) Dispatch of "closest responder" based on GPS location, (2) Mapping/response directions to responders based on GPS, (3) Synchronization of thousands of simulcast systems across the country based on GPS time signals and a myriad of other mission critical functions requires a detailed interference study as requested by NTIA to be conducted by qualified technical specialists who understand the GPS, including its classified roles/uses.

The proposal could pose harmful interference to GPS use by adversely affecting the reception of GPS signals used by public safety communications systems and devices. While the extent of the potential interference is not yet fully known, public safety cannot tolerate interference that negatively impacts its critical communications.

As we understand it, LightSquared proposes to operate a terrestrial wireless service in a band allocated to mobile space-based services by deploying a network of densely populated terrestrial transmitters whose transmissions would blanket entire urban areas. This could radically change and degrade the spectrum environment in which adjacent GPS signals are received, as strong signals from the LightSquared facilities could block GPS reception by public safety communications facilities and devices.

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American Association of State Highway and Transportation Officials | American Radio Relay League | Association of Fish and Wildlife Agencies | Association of Public Safety Communications Officials | Forestry Conservation Communications Association | International Association of Chiefs of Police | International Association of Emergency Managers | International Association of Fire Chiefs | International Municipal Signal Association | National Association of State Chief Information Officers | National Association of State Emergency Medical Services Officials | National Association of State Foresters | National Association of State Technology Directors | National Emergency Number Association | National Sheriffs' Association

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The Commission and public safety already have extensive experience on the problems created when interference must be resolved after the fact. Public Safety has been involved in the multi-year 800 MHz rebanding initiative in which the time originally predicted for conclusion continues to expand. Public safety simply does not have the resources needed to “fix” another major interference problem after-the-fact. Fortunately, in the case of LightSquared’s application, there is awareness and recognition that there is a potential problem, so it should be resolved at the outset before harmful interference has a chance to occur.

NPSTC appreciates the recommendation LightSquared makes that the Commission should include a condition on the grant of its application to create a process that addresses interference concerns regarding GPS, and its further agreement that the process must be completed to the FCC’s satisfaction before LightSquared commences offering commercial service.<sup>1</sup> LightSquared also set forth a proposal to the NTIA committing to “...Organize and lead an industry group comprised of major participants in the telecom and GPS industries, including chipset and device manufacturers, service providers, academic experts, user groups and others...” and indicated that “To support this group and fund its work, including testing and analysis, LightSquared will commit up to \$20 million.”<sup>2</sup>

NPSTC therefore provides the following recommendations:

- 1) Efforts to determine the degree and impact of interference to GPS from the LightSquared system must include public safety, not just other commercial services;
- 2) NPSTC and its designated technical representatives should be included in any testing;
- 3) It is premature to cap LightSquared’s financial responsibility at the \$20 million offered to support testing, pending the additional analysis to determine the extent and degree of impact to the reception of GPS, as well as the full cost of any viable remedies needed to prevent interference.
- 4) The FCC should require thorough interference analysis and testing to GPS use by public safety and others prior to granting LightSquared authority to provide service. However, should the Commission still move forward with a conditional grant prior to testing, NPSTC strongly recommends that any grant be conditioned on not causing interference to GPS use by public safety and other critical entities, in addition to any protection provided for commercial systems.

We appreciate your attention to this matter.

Respectfully submitted,



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<sup>1</sup> LightSquared letter to the Commission, January 21, 2011.

<sup>2</sup> Light Squared letter via email to NTIA, January 6, 2011.

cc:

Admiral James A. Barnett, Jr.  
Chief, Public Safety and Homeland Security Bureau

The Honorable Lawrence E. Strickling  
Assistant Secretary for Communications & Information  
National Telecommunications and Information Administration

Geoff Stearn  
Vice President, Spectrum Development  
LightSquared